

**Before the
Federal Communications Commission
Washington, DC 20554**

In the Matter of)	
)	
Bridging the Digital Divide for Low-Income Consumers)	WC Docket No. 17-287
)	
Lifeline and Link Up Reform and Modernization)	WC Docket No. 11-42
)	
Telecommunications Carriers Eligible for Universal Service Support)	WC Docket No. 09-197

COMMENTS OF APPLIED RESEARCH DESIGNS, INC.

Applied Research Designs, Inc. (“AR Designs”), by its attorney, submits the following comments on the Commission’s *Notice of Proposed Rulemaking and Notice of Inquiry* (“NPRM”) in the above-captioned proceeding.¹

I. INTRODUCTION

AR Designs is a certificated Minority Business Enterprise (MBE) in the City of Chicago and the State of Illinois as an established facilities-based internet access service provider serving mixed- and low-income residents of south side Chicago on a non-Lifeline basis for over twelve years.

AR Designs is in a unique position in this proceeding, in that it was granted Lifeline ETC designation pursuant to a Wireline Competition Bureau Order in January 2017,² only to have that

¹ *Bridging the Digital Divide for Low-Income Consumers et al.*, Fourth Report and Order, Order on Reconsideration, Memorandum Opinion and Order, Notice of Proposed Rulemaking, and Notice of Inquiry, WC Docket No. 17-287 *et al.*, FCC 17-155 (rel. Dec. 1, 2017).

² *Order*, DA 17-87 (WCB, rel. Jan. 18, 2017).

designation revoked in the Bureau's *Order on Reconsideration* two weeks later due to the Commission's concerns regarding the prior Commission's establishment of a federal, multi-state Lifeline ETC designation process.³ AR Designs accepts the Commission's judgment that state commissions should continue to be primarily responsible for designating Lifeline ETCs, and remains committed to providing high quality, facilities-based Lifeline service to eligible low income consumers upon the Commission's clarification of its Lifeline rules and policies in this proceeding.

Through a combination of its own facilities and engineering expertise coupled with leased network access arrangements, as of January 2017 AR Designs provided broadband service to over 1,800 residents of Oakwood Shores, a community developed and managed by The Community Builders, Inc. (<http://www.tcbinc.org/>), a national nonprofit real estate developer that owns or manages more than 11,000 low-income, senior and mixed-income apartment units in communities throughout the United States. Oakwood Shores is located about three miles south of downtown Chicago in an economically depressed and technologically underserved "bandwidth desert" due to a dearth of affordable advanced telecommunications infrastructure. AR Designs has partnered with The Community Builders and with leading non-profit organizations EveryoneOn and ConnectHome in helping to eliminate the digital divide by making high-speed, low-cost Internet service and computers and free digital literacy courses accessible to unconnected Americans in technologically underserved and economically depressed communities.

³ *Order on Reconsideration*, DA 17-128 (WCB, rel. Feb. 3, 2017).

II. THE COMMISSION’S LIFELINE REFORMS SHOULD FOSTER “GIGABIT OPPORTUNITY ZONES” WITH LOCAL BROADBAND DEPLOYMENT AND TECHNOLOGICAL INNOVATION

As described above, AR Designs’ proposed Lifeline-supported service is the very archetype of the kind of competitive, civic-minded and diverse offering leveraging public-private partnerships — one that enables deserving low income residents of an economically challenged area to obtain critical, job-creating and affordable high speed broadband service — that is and must be a core public interest objective of this Commission.⁴ AR Designs’ facilities-based last mile network and business model furthers the FCC’s mission to bridge the digital divide through public-private partnerships, while at the same time conserving scarce government resources in achieving infrastructure upgrades. AR Designs’ fiber-and-fixed-wireless redundant network complies fully with the Commission’s proposed service requirements.

Specifically, AR Designs has partnered with Windstream Communications to distribute high-speed broadband and VoIP phone service through the combination of a Windstream-constructed fiber-to-facilities buildout, designed to AR Designs’ specifications, and AR Designs’ own redundant last mile fixed wireless point-to-point millimeter wave links to the Oakwood Shores development and eventually to other communities. AR Designs’ service architecture enables carrier-grade connectivity and network diversity by fiber and digital millimeter wave technology to the often technologically underserved and economically distressed communities developed by and managed by The Community Builders. AR Designs’ fixed wireless network utilizes digital microwave/ millimeter wave technologies to beam licensed wireless transmissions via an installed base of rooftop mounted radios. This configuration enables the delivery of high speed, high throughput, and yet affordable internet and voice service to its customer base.

⁴ See, e.g., Remarks of FCC Chairman Ajit Pai at Carnegie Mellon University, “Bringing the Benefits of the Digital Age to All Americans,” March 15, 2017, *available at* <https://www.fcc.gov/document/chairman-pai-bringing-benefits-digital-age-all-americans>.

Moreover, AR Designs is currently in the process of upgrading its network with Windstream to enable the delivery of a still higher bandwidth capacity to the designated service area, and AR Designs is working with The Community Builders and Windstream to expand service to four nearby low-income communities.

This plan is exactly in synch with Chairman Pai’s vision of “Gigabit Opportunity Zones” leveraging public-private partnerships “to deploy high-speed broadband services in low-income neighborhoods,” in order to disrupt and transform a status quo where “fiber was much less likely to be deployed in low-income neighborhoods” and to overcome the “regulatory inertia” that has stymied broadband deployment in these areas to date.⁵ Importantly, such local, inner-city facilities deployment also fosters the stated objective of the NPRM to “target Lifeline support to bring digital opportunity to low-income areas where service providers have less incentive to invest in facilities or offer robust broadband offerings compared to other areas”⁶ — a practice commonly known (and labeled in the pre-adoption draft of the NPRM) as “digital redlining.”⁷ In short, such a facilities-based deployment plan does precisely what the Commission seeks, and breaks through the obstacles that Chairman Pai has denounced, by deploying fiber far into AR Designs’ proposed south side Chicago service area and providing last-mile connectivity to eligible low income subscribers.

III. THE COMMISSION MUST BE FAITHFUL TO BOTH ITS BROADBAND DEPLOYMENT GOALS AND TO THE STATUTORY MANDATE OF SECTION 214

AR Designs is confident that its above-described plans for last-mile facilities-based Lifeline service to its customers complies fully with the proposals in the Commission’s NPRM.

⁵ *Id.* at p.6.

⁶ NPRM at para 127. *See id.* at paras. 127-129 & n. 246.

⁷ *See* Draft NPRM (FCC-CIRC1711-05, rel. Oct. 26, 2017) at paras. 123-125.

AR Designs urges the Commission to adopt definitions and rules that would allow smaller, diverse, competitive, regional and local facilities-based Lifeline services to exist and flourish under its new rules, while remaining faithful to the plain language and definitions adopted by Congress in Section 214 of the Communications Act.

The NPRM states: “We propose limiting Lifeline support to broadband service provided over facilities-based broadband networks that also support voice service. Under this proposal, Lifeline providers that are partially facilities-based may obtain designation as an ETC, but would only receive Lifeline support for service provided over the facilities they own.”⁸ Such a formulation may violate the plain language of section 214(e)(1) of the Communications Act, which commands that a state-designated ETC “*shall* be eligible to receive universal service support in accordance with section 254 of this title and shall . . . offer the services that are supported by Federal universal service support mechanisms . . . *either using its own facilities or a combination of its own facilities and resale of another carrier’s services.*”⁹ Thus, Congress clearly mandated that an ETC may employ a “combination” of its own facilities and resale in constructing an offering that is eligible for universal service support.

The NPRM acknowledges this statutory command, and “seek[s] comment on how to balance Congress’s expectation that ETCs would invest universal service support in the areas they serve *and its recognition that some amount of resale should be permissible.*”¹⁰ However, the NPRM does not resolve this apparent contradiction with its “facilities-only” proposal, and indeed seeks comment on this issue in an “alternative” context.¹¹

⁸ NPRM at para. 67.

⁹ 47 U.S.C. § 214(e)(1) (emphasis added).

¹⁰ NPRM at para. 70 (emphasis added).

¹¹ *Id.*

Given that the Act commands that a combination of facilities and resale may be employed in the provision of Lifeline-supported services — and because a rigid insistence on limiting Lifeline support *only* to network providers “for service provided over the facilities they own” would both violate that statutory command and could virtually limit the Lifeline program to monopoly wireline ILECs and three or four ubiquitous wireless network owners — the Commission’s final rules in this matter clearly must, at the least, allow Lifeline providers to employ a combination of facilities and resale in order to provide a full suite of mobile and fixed services. Failure to do so would tremendously limit and threaten the viability of the Lifeline program, and foreclose virtually all competition and innovation among Lifeline service providers. Indeed, facilities-based incumbent carriers often have shown little desire to provide Lifeline services, and indeed are *relinquishing* their state Lifeline ETC designations in droves. For these reasons, last week the NARUC adopted a Resolution strongly urging the Commission to continue to allow Lifeline support for non-facilities based service offerings.¹²

Finally, adoption of a rigid facilities-only approach could have the perverse effect of enshrining and exacerbating the “digital redlining” that the Commission has recognized and decried, and would leave deserving and eligible low income households with less choice in providers or plans. Such a draconian restriction to purely facilities-based networks is utterly unnecessary to deter waste, fraud and abuse in the program, inasmuch as the combination of the fully operational NLAD and the National Verifier, which will be fully operational within a year, will obviate the Commission’s remaining concerns in this regard.

¹² *Resolution to Ensure that the Federal Lifeline Program Continues to Provide Service to Low-Income Households* (adopted Feb. 14, 2018), available at <https://pubs.naruc.org/pub/E0D49A02-AAAA-6EDE-79A1-9D97B1C6E393>. Tellingly, the NARUC rejected a proposed Resolution that would have supported the facilities-based-only approach of the NPRM.

IV. CONCLUSION

AR Designs embraces the FCC's vision to close the digital divide by ensuring affordable broadband internet and voice access to all. AR Designs is ready and eager to provide such affordable broadband and voice service to communities that so desperately need it. Our public-private partnerships make it possible for mixed income communities to have access to the internet at minimal cost. We look forward to integrating the Lifeline National Verifier system into our network platform to further guard against waste, fraud and abuse.

AR Designs respectfully submits that both the Communications Act and the Commission's policy to foster broadband deployment to low income areas and populations demand that the final rules adopted in this proceeding allow maximum competition and diversity in Lifeline service offerings, and permit Lifeline support for broadband and voice services provided using a combination of an ETC's own facilities and resale of another carrier's services.

Respectfully submitted,

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